



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200  
Fax 613 632-5246

**D412-742-023**  
**Job Sheet 201686**



**Part No:** D412-742-023

**Job Qty:** 1 pcs

**Part Name:** New Skidtube, DART (Apical) Tri-Bag Float Compatible - Fits LH or RH



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 10/8/19

**Job Tracking No:**

**Created By:** Marie Lajeunesse

**Due Date:** 11/4/19

**Description:**

**Note:** IIN-D412-742-2 REV.A/ DSI9800 REV.A IPP REV:A 17.11.02 NEW ISSUE DD VERF:JFS IPP REV:B 18.08.20  
AS PER CHG002 (DSI 9800) DD VERF:DP

**Ship Via:**

### Bill of Materials

### Job Routing

| Op<br>No | Operation              | Qty   | Start Date | Due<br>Date | Standard     |            | Workcenter/Supplier   |           | Sign-off |
|----------|------------------------|-------|------------|-------------|--------------|------------|-----------------------|-----------|----------|
|          |                        |       |            |             | Setup<br>Hrs | Run<br>Hrs | Workcenter / Supplier | Lead Time |          |
| 110      | Packaging 1 - Pick Kit | 1 pcs |            | 11/4/19     | 0.00         | 0.00       | Packaging 1 - 1       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 2       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 3       | ✓         |          |
|          |                        |       |            |             |              |            | Packaging 1 - 4       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 5       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 6       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 7       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 8       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 9       |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 10      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 11      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 12      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 13      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 14      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 15      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 16      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 17      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 18      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 19      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 20      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 21      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 22      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 23      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 24      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 25      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 26      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 27      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 28      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 29      |           |          |
|          |                        |       |            |             |              |            | Packaging 1 - 30      |           |          |

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Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
CANADA  
TEL.: 1 613 632-5200  
Email: sales@dartaero.com  
www.dartaerospace.com

**Container No:** S231991



**Part:** D412-742-023

**Job No:** 201686

**Serial No/Batch:** S231991

**Revision:** A/A

**Inspector:**

**Exp Date:**

**Instructions:** FAA STC SR01583SE 18/10/17, TCA STC SH05-

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|                  |       |         |           |                        |  |
|------------------|-------|---------|-----------|------------------------|--|
| 120 QC 4         | 1 pcs | 11/4/19 | 0.00 0.00 | Packaging 1 - 31       |  |
|                  |       |         |           | Packaging 1 - 32       |  |
|                  |       |         |           | Packaging 1 - 33       |  |
|                  |       |         |           | Packaging 1 - 34       |  |
|                  |       |         |           | Packaging 1 - 35       |  |
|                  |       |         |           | Packaging 1 - 36       |  |
|                  |       |         |           | QC 4 - 28              |  |
|                  |       |         |           | QC 4 - 58              |  |
|                  |       |         |           | QC 4 - 69              |  |
|                  |       |         |           | QC 4 - 9               |  |
|                  |       |         |           | QC 4 - 46              |  |
|                  |       |         |           | QC 4 - 68              |  |
|                  |       |         |           | QC 4 - 72              |  |
|                  |       |         |           | QC 4 - 74              |  |
|                  |       |         |           | QC 4 - 75              |  |
|                  |       |         |           | QC 4 - 78              |  |
|                  |       |         |           | Packaging 3 - 1 - B4B  |  |
|                  |       |         |           | Packaging 3 - 2 - B4B  |  |
|                  |       |         |           | Packaging 3 - 3 - B4B  |  |
|                  |       |         |           | Packaging 3 - 4 - B4B  |  |
|                  |       |         |           | Packaging 3 - 5 - B4B  |  |
|                  |       |         |           | Packaging 3 - 6 - B4B  |  |
|                  |       |         |           | Packaging 3 - 7 - B4B  |  |
|                  |       |         |           | Packaging 3 - 8 - B4B  |  |
|                  |       |         |           | Packaging 3 - 9 - B4B  |  |
|                  |       |         |           | Packaging 3 - 10 - B4B |  |
|                  |       |         |           | Packaging 3 - 11 - B4B |  |
|                  |       |         |           | Packaging 3 - 12 - B4B |  |
|                  |       |         |           | Packaging 3 - 13 - B4B |  |
|                  |       |         |           | Packaging 3 - 14 - B4B |  |
|                  |       |         |           | Packaging 3 - 15 - B4B |  |
|                  |       |         |           | Packaging 3 - 16 - B4B |  |
|                  |       |         |           | Packaging 3 - 17 - B4B |  |
|                  |       |         |           | Packaging 3 - 18 - B4B |  |
|                  |       |         |           | Packaging 3 - 19 - B4B |  |
|                  |       |         |           | Packaging 3 - 20 - B4B |  |
|                  |       |         |           | Packaging 3 - 21 - B4B |  |
|                  |       |         |           | Packaging 3 - 22 - B4B |  |
|                  |       |         |           | Packaging 3 - 23 - B4B |  |
|                  |       |         |           | Packaging 3 - 24 - B4B |  |
|                  |       |         |           | Packaging 3 - 25 - B4B |  |
|                  |       |         |           | Packaging 3 - 26 - B4B |  |
|                  |       |         |           | Packaging 3 - 27 - B4B |  |
|                  |       |         |           | Packaging 3 - 28 - B4B |  |
|                  |       |         |           | Packaging 3 - 29 - B4B |  |
|                  |       |         |           | Packaging 3 - 30 - B4B |  |
|                  |       |         |           | Packaging 3 - 31 - B4B |  |
|                  |       |         |           | Packaging 3 - 32 - B4B |  |
|                  |       |         |           | Packaging 3 - 33 - B4B |  |
|                  |       |         |           | Packaging 3 - 34 - B4B |  |
| 135 DC - 1 - B4B | 1 pcs | 11/4/19 | 0.00 0.00 | Packaging 3 - 35 - B4B |  |
|                  |       |         |           | Packaging 3 - 36 - B4B |  |
| 140 QC 21 - FG   | 1 pcs | 11/4/19 | 0.00 0.00 | DC - 1 - B4B           |  |
|                  |       |         |           | DC - 2 - B4B           |  |
|                  |       |         |           | QC 21 - FG - 21        |  |
|                  |       |         |           | QC 21 - FG - 70        |  |
|                  |       |         |           | QC 21 - SA - 53        |  |

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21  
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DAS  
21  
NOV 15 2019

Part Op 110 - Packaging1-4 (Pick Kit)  
Descriptions: 120 - QC4 (QC4- 100% Inspect kits for completeness)

10/8/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

**130** - Packaging3-2 (Identify as per dwg & Stock Location:\_\_\_\_\_) Identify and pack for shipping as per PPP D412-742-

023 Location :FG083

**135** - DC (Document Control) Photocopy blue file and create labels per PPP D412-742-023 CHG002

**140** - QC21 (QC21- Final Inspection - Work Order Release) NULL

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## Job BOM

| Part / Item                       | Component Name                                                         | Quantity       | Operation                       | Container       |
|-----------------------------------|------------------------------------------------------------------------|----------------|---------------------------------|-----------------|
| AN3C46A                           | Bolt                                                                   | 13 Ea (13 ea)  | ✓ 110-Packaging 1 -<br>Pick Kit | S207727 ✓       |
| AN4C47A                           | Bolt                                                                   | 4 Ea (4 ea)    | ✓ 110-Packaging 1 -<br>Pick Kit | S231140 ✓       |
| AN4C52A                           | Bolt                                                                   | 4 Ea (4 ea)    | ✓ 110-Packaging 1 -<br>Pick Kit | S231108 ✓       |
| AN4C6A                            | Bolt                                                                   | 16 Ea (16 ea)  | ✓ 110-Packaging 1 -<br>Pick Kit | S149189 ✓       |
| AN4C7A                            | Bolt                                                                   | 4 Ea (4 ea)    | ✓ 110-Packaging 1 -<br>Pick Kit | S222451 ✓       |
| AN6C12A                           | Bolt                                                                   | 8 Ea (8 ea)    | ✓ 110-Packaging 1 -<br>Pick Kit | S143192(x7) S ✓ |
| D2747                             | Set Screw                                                              | 4 pcs (4 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S150679 ✓       |
| D2876                             | Saddle Spacer                                                          | 2 pcs (2 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S222928 ✓       |
| D2877                             | Saddle Spacer                                                          | 2 pcs (2 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S210379 ✓       |
| D3405-041                         | Ground Handling Lug                                                    | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S207250 ✓       |
| D3405-043                         | Ground Handling Lug                                                    | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S206454 ✓       |
| D3407-047                         | Tow Ring                                                               | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S226589 ✓       |
| D3456-1                           | Washer                                                                 | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S199355 ✓       |
| D3533-1                           | Set Screw                                                              | 2 pcs (2 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S203845 ✓       |
| D3672-3                           | Washer, Phenolic                                                       | 32 pcs (32 ea) | ✓ 110-Packaging 1 -<br>Pick Kit | S219430 ✓       |
| D3672-9                           | Washer                                                                 | 8 pcs (8 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | F153355 ✓       |
| D5446-1                           | Bushing                                                                | 24 pcs (24 ea) | ✓ 110-Packaging 1 -<br>Pick Kit | S227771 ✓       |
| D5466-1                           | Saddle, Fwd, In                                                        | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S22964 ✓        |
| D5467-1                           | Saddle, Fwd, Out                                                       | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S229618 ✓       |
| D5468-1                           | Saddle, Aft, Out                                                       | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S229037 ✓       |
| D5469-1                           | Saddle, Aft, In                                                        | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S229056 ✓       |
| D5482-1                           | Washer                                                                 | 8 pcs (8 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S230736 ✓       |
| D5482-3                           | Washer                                                                 | 2 pcs (2 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S178013 ✓       |
| D5513-1                           | Bushing                                                                | 6 pcs (6 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S190715 ✓       |
| MS21043-3                         | Nut                                                                    | 3 Ea (3 ea)    | ✓ 110-Packaging 1 -<br>Pick Kit | S225331 ✓       |
| MS21043-4                         | Nut                                                                    | 28 Ea (28 ea)  | ✓ 110-Packaging 1 -<br>Pick Kit | S225048 ✓       |
| NAS1149C0332R Washer (AN960C10L)  |                                                                        | 75 Ea (75 ea)  | ✓ 110-Packaging 1 -<br>Pick Kit | S211548 ✓       |
| NAS1149C0432R Washer (AN960C416L) |                                                                        | 32 Ea (32 ea)  | ✓ 110-Packaging 1 -<br>Pick Kit | S209072 ✓       |
| NAS1149C0632R Washer (AN960C616L) |                                                                        | 8 pcs (8 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S176870 ✓       |
| AN4C53A                           | Bolt                                                                   | 4 Ea (4 ea)    | ✓ 110-Packaging 1 -<br>Pick Kit | S140478 ✓       |
| D412-742-053                      | Repl. Skidtube, DART (Apical) Tri-Bag Float Compatible - Fits LH or RH | 1 pcs (1 ea)   | ✓ 110-Packaging 1 -<br>Pick Kit | S213816 ✓       |

QC.4

## Job Allocations

| Operation                  | Component Part | Required | Inventory | Allocated |
|----------------------------|----------------|----------|-----------|-----------|
| 110-Packaging 1 - Pick Kit | AN3C46A        | 13       | 210       | 0         |
|                            | AN4C47A        | 4        | 70        | 0         |
|                            | AN4C52A        | 4        | 86        | 0         |
|                            | AN4C53A        | 4        | 37        | 0         |
|                            | AN4C6A         | 16       | 486       | 0         |
|                            | AN4C7A         | 4        | 55        | 0         |
|                            | AN6C12A        | 8        | 61        | 0         |
|                            | D2747          | 4        | 120       | 0         |
|                            | D2876          | 2        | 47        | 0         |
|                            | D2877          | 2        | 75        | 0         |
|                            | D3405-041      | 1        | 30        | 0         |
|                            | D3405-043      | 1        | 27        | 0         |
|                            | D3407-047      | 1        | 5         | 0         |
|                            | D3456-1        | 1        | 148       | 0         |
|                            | D3533-1        | 2        | 167       | 0         |
|                            | D3672-3        | 32       | 520       | 0         |
|                            | D3672-9        | 8        | 465       | 0         |
|                            | D412-742-053   | 1        | 2         | 0         |
|                            | D5446-1        | 24       | 39        | 0         |
|                            | D5466-1        | 1        | 0         | 0         |
|                            | D5467-1        | 1        | 1         | 0         |
|                            | D5468-1        | 1        | 1         | 0         |
|                            | D5469-1        | 1        | 1         | 0         |
|                            | D5482-1        | 8        | 62        | 0         |
|                            | D5482-3        | 2        | 48        | 0         |
|                            | D5513-1        | 6        | 146       | 0         |
|                            | MS21043-3      | 3        | 958       | 0         |
|                            | MS21043-4      | 28       | 466       | 0         |
|                            | NAS1149C0332R  | 75       | 3,974     | 0         |
|                            | NAS1149C0432R  | 32       | 1,356     | 0         |
|                            | NAS1149C0632R  | 8        | 475       | 0         |

## Part Specifications

Specifications could not be found.

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Entered: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

NCR No. \_\_\_\_\_

Job: \_\_\_\_\_

Part No. \_\_\_\_\_

### DISPOSITION

Rework ☐ ☐ ☐  
Scrap ☐ ☐ ☐  
Use-as-is ☐ ☐ ☐

### DEPARTMENT/PROCESS

Skid-tube ☐ ☐ ☐  
Machining ☐ ☐ ☐  
Large Fab ☐ ☐ ☐

Cross tube ☐ ☐ ☐  
Small Fab ☐ ☐ ☐  
Finishing ☐ ☐ ☐

Eng. (Non-AW) ☐ ☐ ☐  
Prod. Eng. Coord. ☐ ☐ ☐  
Rec/Store/Packaging ☐ ☐ ☐

Engineering ☐ ☐ ☐  
Water Jet ☐ ☐ ☐  
Supplier ☐ ☐ ☐  
Quality ☐ ☐ ☐

Date: \_\_\_\_\_

Sequence #: \_\_\_\_\_

QTY Affected: \_\_\_\_\_

MRB (QS1042)

### Description Work Order Deviation

### Disposition

Completed By \_\_\_\_\_

Lead hand / Supervisor \_\_\_\_\_

QC / QA Coordinator \_\_\_\_\_

### Root Cause

Operator ☐ ☐ ☐ ☐  
Manufacturing Process ☐ ☐ ☐ ☐  
Equip/Tooling ☐ ☐ ☐ ☐  
Handling/Preservation ☐ ☐ ☐ ☐  
Material ☐ ☐ ☐ ☐  
Product Improvement ☐ ☐ ☐ ☐  
Process Improvement ☐ ☐ ☐ ☐  
Human Factors ☐ ☐ ☐ ☐

### FAULT CATEGORY

Pressure/Forced ☐ ☐ ☐ ☐  
Bending ☐ ☐ ☐ ☐  
Crushing ☐ ☐ ☐ ☐  
Cracks ☐ ☐ ☐ ☐  
Crimp/Kink/Ripple/Wave/Twist ☐ ☐ ☐ ☐  
Marks/Chatter ☐ ☐ ☐ ☐  
Mislabeled ☐ ☐ ☐ ☐  
Other/Details: \_\_\_\_\_

Contamination ☐ ☐ ☐ ☐  
Misaligned/off center ☐ ☐ ☐ ☐  
BOM/Route ☐ ☐ ☐ ☐  
Broken/Damage/Defect ☐ ☐ ☐ ☐  
Incomplete/Unclear Instructions ☐ ☐ ☐ ☐  
Drill Holes ☐ ☐ ☐ ☐  
Fit/Function ☐ ☐ ☐ ☐

Power Loss/Surge ☐ ☐ ☐ ☐  
Folio/Program ☐ ☐ ☐ ☐  
Grain Direction ☐ ☐ ☐ ☐  
Weld ☐ ☐ ☐ ☐  
Wrong Stock Pulled ☐ ☐ ☐ ☐  
Out of Sequence ☐ ☐ ☐ ☐  
Off-set/Set-up ☐ ☐ ☐ ☐

Positioned Wrong ☐ ☐ ☐ ☐  
Outside Tolerance ☐ ☐ ☐ ☐  
Drawing ☐ ☐ ☐ ☐  
Finish ☐ ☐ ☐ ☐  
Part Lost/Missing ☐ ☐ ☐ ☐  
Misread ☐ ☐ ☐ ☐

## 5.2 D412-742-023 (DART TRI-BAG) Float Skidtube Installation Parts List

| Item | Qty<br>-023 | Qty<br>-053 | Part Number    | Description                 |
|------|-------------|-------------|----------------|-----------------------------|
|      | X           |             | D412-742-023   | FLOAT SKIDTUBE INSTALLATION |
|      | 1           | X           | D412-742-053   | FLOAT SKIDTUBE              |
|      |             | 1           | D412-742-055   | WEARPLATE KIT               |
|      |             | 1           | D5425-043      | FLOAT SKIDTUBE ASSY.        |
| 1    |             | *6          | *D3672-1       | *WASHER                     |
| 2    |             | 30          | D5513-1        | BUSHING                     |
| 3    |             | *12         | *D5512-1       | *CROSSBOLT SPACER           |
| 5    |             | *1          | *D5525-3       | *FLOAT SKIDTUBE             |
| 6    |             | *1          | *D5483-041     | *TOW CAP ASSY.              |
| 7    |             | *1          | *D5484-041     | *AFT CAP ASSY.              |
| 12   |             | *18         | *D5518-1       | *CROSSBOLT SPACER           |
| 13   |             | *6          | *AN3C5A        | *BOLT                       |
| 14   |             | 15          | AN3C44A        | BOLT                        |
| 15   |             | *6          | *NAS1149C0332R | *WASHER                     |
| 16   |             | 15          | MS21043L3      | NUT                         |
| 30   | 1           |             | D5466-1        | SADDLE, FWD INSIDE          |
| 31   | 1           |             | D5467-1        | SADDLE, FWD OUTSIDE         |
| 32   | 1           |             | D5468-1        | SADDLE, AFT OUTSIDE         |
| 33   | 1           |             | D5469-1        | SADDLE, AFT INSIDE          |
| 34   | 16          |             | AN4C6A         | BOLT                        |
| 35   | 28          |             | MS21043-4      | NUT                         |
| 36   | 32          |             | NAS1149C0432R  | WASHER                      |
| 37   | 32          |             | D3672-3        | PHENOLIC WASHER             |
| 38   | 8           |             | AN4C52A        | BOLT                        |
| 39   | 24          |             | D5446-1        | BUSHING                     |
| 40   | 8           |             | AN6C12A        | BOLT                        |
| 41   | 8           |             | NAS1149C0632R  | WASHER                      |
| 42   | 8           |             | D3672-9        | WASHER                      |
| 43   | 2           |             | D2876          | SADDLE SPACER               |
| 44   | 2           |             | D2877          | SADDLE SPACER               |
| 45   | 4           |             | D2747          | SET SCREW                   |
| 46   | 2           |             | D3533-1        | SET SCREW                   |
| 47   | 4           |             | AN4C7A         | BOLT                        |
| 50   | 1           |             | D3407-047      | TOW RING                    |
| 51   | 2           |             | D5482-3        | ACETAL WASHER               |
| 52   | 1           |             | D3456-1        | WASHER                      |
| 60   | 1           |             | D3405-041      | GHW LUG                     |
| 61   | 1           |             | D3405-043      | GHW LUG                     |
| 62   | 4           |             | AN4C47A        | BOLT                        |
| 63   | 8           |             | D5482-1        | ACETAL WASHER               |
| 71   | 75**        |             | NAS1149C0332R  | WASHER                      |
| 72   | 6           |             | D5513-1        | BUSHING                     |
| 73   | 3           |             | MS21043-3      | NUT                         |
| 74   | 13          |             | AN3C46A        | BOLT                        |

\*DENOTES PART IS INCLUDED WITH D5425-043 ASSEMBLY

\*\*INCLUDES ADDITIONAL WASHERS TO COMPENSATE FOR VARIANCE IN STACKUP THICKNESS